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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,271	06/09/2006	Didier Marsacq	128259	4808
27049 7590 01/07/2010 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
HAN, KWANG S				
ART UNIT		PAPER NUMBER		
1795				
NOTIFICATION DATE		DELIVERY MODE		
01/07/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction27049@oliff.com  
jarnstrong@oliff.com

**Office Action Summary****Application No.**

10/582,271

**Applicant(s)**

MARSACQ ET AL.

**Examiner**

Kwang Han

**Art Unit**

1795

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

**ALKALI FUEL CELL UNAFFECTED BY CARBONATION**

Examiner: K. Han    SN: 10/582,271    Art Unit: 1795    January 6, 2010

**Detailed Action**

1. The Applicant's request for reconsideration filed on January 6, 2010 was received.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13, 14, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 13 and 14, the phrase "possibly" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claim 17, the phrase "formed by the electronic conductive element" is indefinite because it is unclear as to how one element is formed by another. For the purposes of examination the phrase will be interpreted as the conductive element and catalytic element being in contact with each other.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 11-13 and 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Jaouen (WO 02/35633).

Regarding claims 11-13 and 15-16, Jaouen discloses an alkaline fuel cell (Pg 2:13-16) comprising an anode, a cathode, a hydroxide ion conducting solid membrane, wherein the electrodes form an active layer that is in contact with the solid membrane (Figure 4) and the material forming the active layer comprises platinum (catalyst element), carbon particle (conductive element), and a conducting polymer (element conducting hydroxide ions) (Pg 5:20-28, Pg 8:1-12) that is a basic anion conducting polymer based on fixed quaternary ammonium groups having vinylaromatic groups (Pg 6:31-Pg 7:4) (e.g. polyvinylpyridine) not comprising any alkaline liquid.

Regarding claim 17, Jaouen discloses the platinum particles deposited on the surface of the carbon particles (Pg 5:20-28).

Regarding claim 18, Jaouen discloses the carbon particles having a size of approximately 30nm (powder) (Pg 7:10-14) which form a grid (Figures 2 and 3).

Regarding claim 19, the solid membrane of Jaouen would inherently have an ionic conductivity that is greater than or equal to 0.005 S/cm. The courts have held that claiming of a property or characteristic which is inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ

430, 433 (CCPA 1977). See MPEP 2112 and 2112.01. When the Examiner has provided a sound bases for believing that the products of the applicant and the prior art are the same, the burden of proof is shifted to the applicant to prove that the product shown in the prior art does not possess the characteristics of the claimed product. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Regarding claim 20, Jaouen discloses a gas diffusion layer (46) so that the active layer (48, 58) is arranged between the diffusion layer and the solid membrane (50) (Figure 4).

### ***Claim Rejections - 35 USC § 103***

7. The claim rejection under 35 U.S.C. 103(a) as unpatentable over Landsman et al. in view of Yao et al. and Hodgdon et al. on claims 11-13, 15-19, and 20 is withdrawn, because of Applicant's arguments.

8. The claim rejection under 35 U.S.C. 103(a) as unpatentable over Landsman et al. in view of Yao et al. and Hodgdon et al. as applied to claim 12 and further in view of Yokoyama et al. on claim 14 is withdrawn, because of Applicant's arguments.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jaouen as applied to claims 11-13 above, and further in view of Yokoyama et al (US 4374924).

The teachings of Jaouen as discussed above are incorporated herein.

Regarding claim 14, Landsman, Yao and Hodgdon are silent towards the polymer formula with R' as shown in formula 2.

Yokoyama disclosed an antistatic layer comprising of a polymer (formula 1 in abstract). The reference teaches the material has low surface electric resistance (2:41-46). It would have been obvious to one of ordinary skill in the art to incorporate the polymer of Yokoyama in the fuel cell of Landsman, Yao, and Hodgdon because Yokoyama teaches the membrane has low surface electric resistance.

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 11-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Contact/Correspondence Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang Han whose telephone number is (571) 270-5264. The examiner can normally be reached on Monday through Friday 8:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on (571) 272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. H./  
Examiner, Art Unit 1795

/Dah-Wei D. Yuan/  
Supervisory Patent Examiner, Art Unit 1795